What is claimed is

1. A sensor module comprising at least one sensor element that is at least partially surrounded by a housing, wherein the housing of the module is flexible, and a transmission means for wireless data transmission is integrated in the module.

2. The sensor module of claim 1, wherein the transmission means contains an antenna and/or an induction coil.

3. The sensor module of claim 1, wherein an operational voltage for the sensor module is inductively coupled in.

4. The sensor module of claim 1, wherein the operational voltage for the sensor module is electromagnetically coupled in.

5. The sensor module of claim 1, wherein the housing consists of one or more flexible foils.

6. The sensor module of claim 1, wherein the flexible housing is designed so that it may be vulcanized into a rubber tire.

7. The sensor module of claim 1, wherein the flexible housing is adapted to the geometry of the receiving unit.

8. The sensor module of claim 1, wherein the sensor module incorporates a memory element.

9. The sensor module of claim 1, wherein the sensor element is a pressure sensor and the entire sensor module is inductively operated.

10. The sensor module of claim 9, wherein a gel is introduced between the flexible cover and the pressure sensor.

11. A method for the production of a sensor module with at least one sensor element, wherein the sensor elements are mounted on a flexible support material and are contacted via a flexible cover.

12. The method of claim 11, wherein a flexible stand-off is introduced between the support material and the cover.